



**Higher Education Equipment Advisory Committee
Roundtable Discussion
Tuesday, October 7, 2014 10:00 a.m.
George Mason Prince William Campus, Occoquan Room 110A**

The JCOTS Higher Education Equipment Advisory Committee held its first meeting on Tuesday, October 7, 2014. Delegate Scott Lingamfelter and former Delegate Joe T. May, co-chairs, presided over the meeting. Representatives from most of Virginia's public institutions of higher education participated in the meeting, either in person or via conference call.

Delegate Lingamfelter began the meeting by explaining that his idea of inventorying and holding out higher ed equipment for use by other universities and private entities is just a concept. He wants the Advisory Committee meeting to provide the opportunity for discussion to develop a smart and well-informed proposal. Joe May provided additional background. He noted that universities have a substantial amount of highly specialized, large equipment which estimated to be worth over \$1 billion. There are efficiencies to be had in inventorying what each university has. He provided a personal example of needing to use a very specialized piece of equipment for something that he was developing at his private business. Instead of purchasing the equipment, he was able to go to a company affiliated with the University of Maryland and pay them to conduct the imaging he needed. Delegate Lingamfelter said this was a real-world scenario that provoked the discussion about how our universities use their equipment, asking if there was a better way for them to do business.

Concerns were raised that equipment purchased through the Higher Education Equipment Trust Fund ("the trust fund") might have some limitations on it, because of the types of bonds used to fund the program. Staff indicated that if inventories were created, they might need to be bifurcated to keep track of this type of equipment. Joe May indicated that University of Maryland had apparently found a way to work around this limitation.

Each participating university at the meeting took a few moments to share how they currently inventory and use their specialized equipment:

- George Mason University: Every department does an inventory of its equipment every year. This is done at the unit level and goes into a central repository, so there is no visibility.
- Norfolk State University: All equipment that it owns is state property. The Clean Room is the most specialized equipment. The university has some relationships with outside companies, although it would like to do more. One issue they face is funding -- there is not enough equipment on campus.
- Radford University: Equipment is managed centrally. It does not have a lot of private or endowed equipment, and primarily relies on state funding. There is good visibility as to what each department has, because the campus is very centralized.
- University of Virginia: The university has a lot of equipment dispersed across the grounds. Most of the equipment is from federal grants. They have a centralized university system for inventory, but not every department knows what other departments have. They conduct an inventory annually.
- Virginia Commonwealth University: VCU has an office of research infrastructure that oversees an array of core labs with specialized equipment. Most equipment is purchased through the trust fund and federal grants. There is a list of "core labs" available on VCU's website, and they advertise to the private sector and other universities. They look at usage, charges, information about the machines, service contracts, etc. The labs are operated on a fee-for-service basis, and the staff run the equipment when leased out. University of Virginia and Virginia Tech also have a "core lab" structure.
- Virginia Community College System indicated that 2014 was the first year that it had access to the trust fund for workforce-related equipment.
- Virginia Institute of Marine Science: The institute got money from the state to build a high-end research vessel that has the potential to conduct environmental impact studies. It also has equipment from federal grants, and private companies. Internally, there is good visibility as to what it possesses. The institute currently works with other agencies, and is doing some work with North Carolina on a fee-for-service basis. It does not currently have an external menu of equipment.
- Virginia Tech: Delegate Lingamfelter asked Virginia Tech about its Institute for Critical Technology and Applied Science (ICTAS). ICTAS is one of 40 service centers (the same concept as VCU's "core labs"). They have already identified the type of equipment the university is able to share, and have done cost studies to determine rates to charge. There is a webpage that lists the service centers, along with internal and external rates. Examples of service centers include smart roads, wind tunnels, and genetic sequencing.
- College of William & Mary: The College has private donations of equipment. It has been operating an applied research center in Newport News with Jefferson Labs, with a specific mission of enabling small businesses associated with NASA Langley and Jefferson Labs.

- James Madison University: The university has about \$76 million in gross depreciable equipment. Some equipment is funded through the trust fund, other comes from grants and donations. The university conducts an annual inventory. Each college knows what equipment it has, but there is probably a gap in knowledge between the science and arts. There is one piece of equipment that is used on a fee-for-service basis.
- Old Dominion University: The university maintains and updates inventories on an annual basis, and sometimes conducts audits. They have some very specialized equipment. Often outside organizations come to ODU because it has the expertise to conduct a funded research project. The university encourages interdisciplinary sharing. Most equipment comes from engineering, trust funds, or funded research. ODU does make equipment available through contract and sponsored research.
- Christopher Newport University: The university is not known for its research and development, although it has done some on-site research with NASA and Jefferson Labs. Its equipment (which is mostly smaller-scale) is inventoried and managed centrally.

Joe May indicated that he would be interested in seeing use of university equipment by private entities more of a retail transaction than a contractual transaction. Delegate Lingamfelter noted that he was aware that there were legal and liability issues present with this model, but promised that any legislation in this area would identify and address these issues.

It was noted that private industry does not often know that all of these resources exist, and that there is a need for visibility as to what is already out there. Delegate Lingamfelter said he had a sense that Virginia does not have a well-articulated window into what's going on at our universities as it relates to research. Some states bridge the gap between basic and applied research better than Virginia. He noted that he is not looking for a one-size-fits-all approach, but that each institution needs better practical visibility.

A representative from Virginia Tech noted that one of the best ways it engages industry is through its corporate research center, which is being expanded into Newport News. He noted that Virginia Tech has seven institutes of research within the university, and they need to make these more visible. Another way to get equipment out for private use is through an affiliated corporation, such as Virginia Tech's tire research entity. This provides a legal structure that insulates the university from liability.

Joe May raised a question as to whether there is an issue of duplication of equipment amongst universities. Lingamfelter asked what a co-op plan might look like, but noted that this was a "down stream" discussion. He also asked if there should be a nexus between making equipment available outside of the university and having those fees go back into research and development. It was noted that service centers are

generally set up for cost recovery, because they want to be able to charge these to grants and so they can't be set to make a profit. But this also means that the equipment is paying for itself over time. It was also pointed out that universities do not want to be seen as competing with for-profit entities, and that there is a non-competitive side of the discussion.

Driving the concept of outside use might be "multi-user" equipment that might fit into a core lab or a service center. Delegate Lingamfelter would like to try to build a model for this concept. It was noted that many pieces of equipment do work best with continual use. The challenge will be in figuring out what to inventory and make visible, setting expectations and parameters, and setting priorities for use. Management and coordination will be a key issues. There are also liability and compliance issues that must be taken into account. It was also noted that recognition of the expertise at each institution was just as important as the equipment itself -- expertise also needs to be made visible.

Delegate Lingamfelter said that he is not looking to mandate certain behaviors by the universities, but that a key issue for legislators is whether we are to the fullest extent possible making the best use of taxpayer investment in equipment. This means knowing what we have, creating visibility, creating revenue opportunity, and making Virginia a better magnet for research partnerships with public and private entities.

Next steps include working on the idea of "consolidated visibility" and figuring out what this would look like. What is it? How would it work? At what granularity? Will it be necessary to have one person at each university in charge of this? Delegate Lingamfelter asked the State Council for Higher Education in Virginia to look at how to proceed with creating an inventory, and look into creating a structured approach to gathering information. Each university should have a point-person assigned to this efforts. JCOTS staff was directed to look at issues related to liability and compliance, as well as intellectual property and Freedom of Information Issues.

The meeting was adjourned, and staff was directed to poll for the next meeting date.